

REMARKS

Claims 1 to 3 have been examined. Claims 4 to 7 have been withdrawn from consideration. Claims 8 to 11 have been added. Support for claims 8 to 11 is found, for example, on page 7, lines 1 to 5, Figs. 1A, 2A, and 4A, and claims 1 and 3. No new matter has been added. Thus, claims 1 to 3 and 8 to 11 are pending.

Drawings

It is alleged that an element mounting portion 4 is not shown in the drawings. However, it is submitted that the element mounting portion 4 is shown in Fig. 9B.

Claim Rejections – 35 USC §103

Claims 1 and 3 have been rejected as being unpatentable over prior art Figures 9A-9B in view of Sasano. Claim 1 has been amended as attached to distinguish more clearly from the cited prior art.

Figs. 9A and 9B do not teach or suggest a resin applied over the glass plate. Sasano shows a transparent sealing plate 9 bonded to the upper surface of the package body 1 through an adhesive 10 composed of an ultraviolet-curable resin (column 5, lines 57 to 61). However, the adhesive 10 does not extend over the entire surface of the plate 9.

In contrast, in the present invention of claim 1 (and dependent claim 3), the adhesive resin is applied over the entire surface of the glass plate. This structure is neither taught nor suggested by the admitted prior art, Figs. 9A and 9B, and Sasano. At least for this reason, claims 1 and 3 are not made obvious by the cited prior art.

Claim 2 has been rejected as being unpatentable Japanese application (Toshiba invention). The Toshiba invention shows a liquid crystal displaying over Figs. 9A and 9B and Sasano and further in view of Toshiba KK's module in which an IC driver 31 *sits on* a light-

shielding adhesive resin 36 (see Fig. 1). The Toshiba invention is not directed to a hollow package structure. The LCD structure of the Toshiba invention is so dissimilar with Sasano's hollow package structure or Figs. 9A and 9B's structure such that a person of ordinary skill in the art would not have been led or motivated to combine the Toshiba invention with Sasano or the admitted prior art.

Furthermore, even if the references are combined, there is no suggestion or teaching in any of the prior art references to apply *the light shielding adhesive resin over the entire glass plate* as claimed in claim 2. Sasano's invention is directed to a hollow package and a solid state image apparatus provided in the package (see, for example, the title and column 2, lines 60 to 67). Thus, the transparent sealing plate 9 placed over the image apparatus must have a high degree of transparency so that the solid state image apparatus can function as an imaging apparatus (see column 4, lines 59 to 65). In view of this, a person of ordinary skill in the art would most certainly not have been motivated to degrade the transparency of the transparent sealing plate 9 by applying a *light-shielding adhesive* over the transparent sealing plate 9.

In the present invention, the effect of having the entire surface of the glass plate applied with the light shielding adhesive resin is to prevent direct light from damaging the circuit member located under the glass plate (see page 13, lines 6 to 13). This advantageous effect is neither taught nor suggested by any of the prior art references. Claim 2 is thus non-obvious for the foregoing reasons.

Furthermore, at least for the same reason as claim 1, claim 2 which is dependent on claim 1 would have been unobvious to a person of ordinary skill in the art.

New Claims

New claims 8 to 11 are unobvious for the same reasons as claim 1 and claim 2. Furthermore, none of the cited references teaches or suggests "a terminal provided on a back of the substrate and electrically connected to the circuit member *through the substrate*" as claimed in claim 8. Claims 8 to 11 would have been unobvious to a person of ordinary skill in the art at least for the foregoing reasons.

Applicant : Haruo Hyodo et al.
Serial No. : 09/963,267
Filed : September 26, 2001
Page : 5

Attorney's Docket No.: 10417-101001 / F51-
136645M/TOM

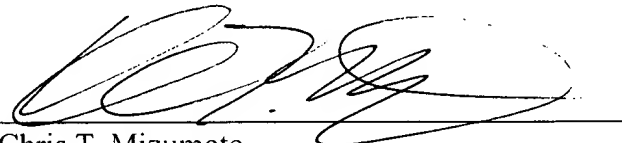
Attached is a marked-up version of the changes being made by the current amendment.

Although this response is being filed on the 20th of May, it is believed that no extension fee is required because the three-month due date, May 19th, 2000, is Sunday.

Applicant asks that all claims be allowed. Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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Version with markings to show changes made

In the claims:

Claim 1 has been amended as follows:

1. (Amended) A semiconductor device comprising:
a supporting substrate made of insulating material;
a conductive pattern provided on a surface of the supporting substrate;
an external connecting terminal provided on a back surface of the supporting substrate and electrically connected to the conductive pattern[s];
a circuit element provided on the conductive pattern;
a glass plate that covers the circuit element and that forms a hollow airtight portion between the supporting substrate and the glass plate; and
an adhesive resin applied [to] over an [overall adhered] entire surface of the glass plate.

Following claims have been added.

8. (New) A semiconductor device comprising:
a substrate;
a circuit member provided on the substrate;
a terminal provided on a back of the substrate and electrically connected to the circuit member through the substrate;
a wall surrounding the circuit member; and
a transparent plate with a light-shielding adhesive resin provided over the transparent plate's entire surface, said transparent plate adhered on the wall and over the circuit member to form an airtight cavity between the substrate and the transparent plate.

9 (New) The semiconductor device according to claim 8 wherein the circuit member comprises:

- a conductive pattern disposed over the substrate; and

Applicant : Haruo Hyodo et al.
Serial No. : 09/963,267
Filed : September 26, 2001
Page : 7

Attorney's Docket No.: 10417-101001 / F51-
136645M/TOM

a semiconductor chip disposed over the conductive pattern.

10. (New) The semiconductor device according to claim 8 wherein the substrate comprises insulating material.

11. (New) The semiconductor device according to claim 8, wherein the circuit member includes a fuse element.